

DATA SHEET

E65/32/27

E cores and accessories

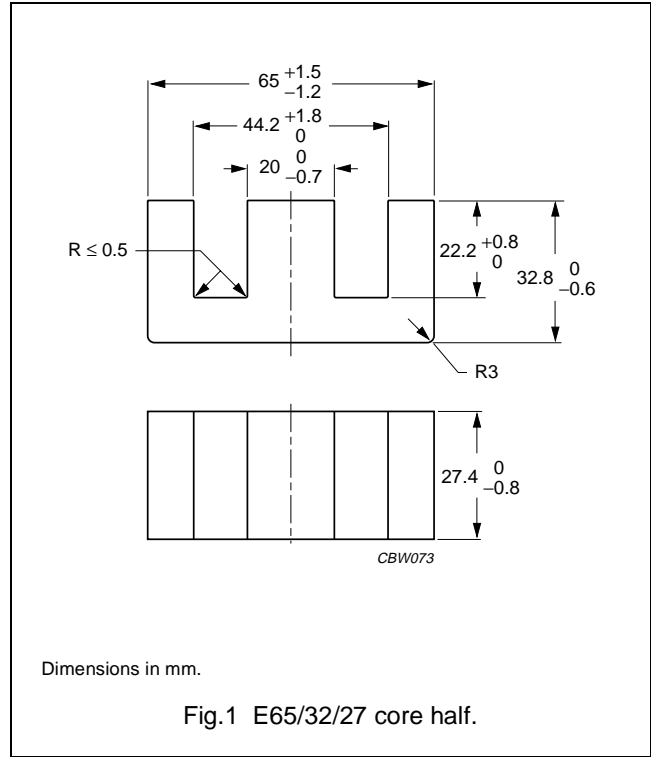
Supersedes data of February 2002

2004 Sep 01

CORE SETS

Effective core parameters

SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(l/A)$	core factor (C1)	0.274	mm ⁻¹
V_e	effective volume	79000	mm ³
l_e	effective length	147	mm
A_e	effective area	540	mm ²
A_{min}	minimum area	530	mm ²
m	mass of core half	≈205	g



Core halves

A_L measured in combination with a non-gapped core half, clamping force for A_L measurements 60 ± 20 N, unless stated otherwise.

GRADE	A_L (nH)	μ_e	AIR GAP (μ m)	TYPE NUMBER
3C90	100 $\pm 5\%$ ⁽¹⁾	≈ 22	≈ 7190	E65/32/27-3C90-E100
	160 $\pm 5\%$ ⁽¹⁾	≈ 35	≈ 3780	E65/32/27-3C90-E160
	250 $\pm 5\%$ ⁽¹⁾	≈ 54	≈ 2050	E65/32/27-3C90-E250
	315 $\pm 5\%$ ⁽¹⁾	≈ 68	≈ 1510	E65/32/27-3C90-E315
	400 $\pm 8\%$ ⁽¹⁾	≈ 87	≈ 1100	E65/32/27-3C90-E400
	630 $\pm 10\%$ ⁽¹⁾	≈ 136	≈ 620	E65/32/27-3C90-E630
	8600 $\pm 25\%$	≈ 1860	≈ 0	E65/32/27-3C90
3C92 des	6000 $\pm 25\%$	≈ 1310	≈ 0	E65/32/27-3C92
3C94	8600 $\pm 25\%$	≈ 1860	≈ 0	E65/32/27-3C94
3F3	100 $\pm 5\%$ ⁽¹⁾	≈ 22	≈ 7190	E65/32/27-3F3-E100
	160 $\pm 5\%$ ⁽¹⁾	≈ 35	≈ 3780	E65/32/27-3F3-E160
	250 $\pm 5\%$ ⁽¹⁾	≈ 54	≈ 2050	E65/32/27-3F3-E250
	315 $\pm 5\%$ ⁽¹⁾	≈ 68	≈ 1510	E65/32/27-3F3-E315
	400 $\pm 8\%$ ⁽¹⁾	≈ 87	≈ 1100	E65/32/27-3F3-E400
	630 $\pm 10\%$ ⁽¹⁾	≈ 136	≈ 620	E65/32/27-3F3-E630
	7300 $\pm 25\%$	≈ 1580	≈ 0	E65/32/27-3F3

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Note

1. Measured in combination with an equal gapped core half.

Core halves of high permeability gradesClamping force for A_L measurements, 60 ± 20 N.

GRADE	A_L (nH)	μ_e	AIR GAP (μm)	TYPE NUMBER
3C11	$16700 \pm 25\%$	≈ 3620	≈ 0	E65/32/27-3C11

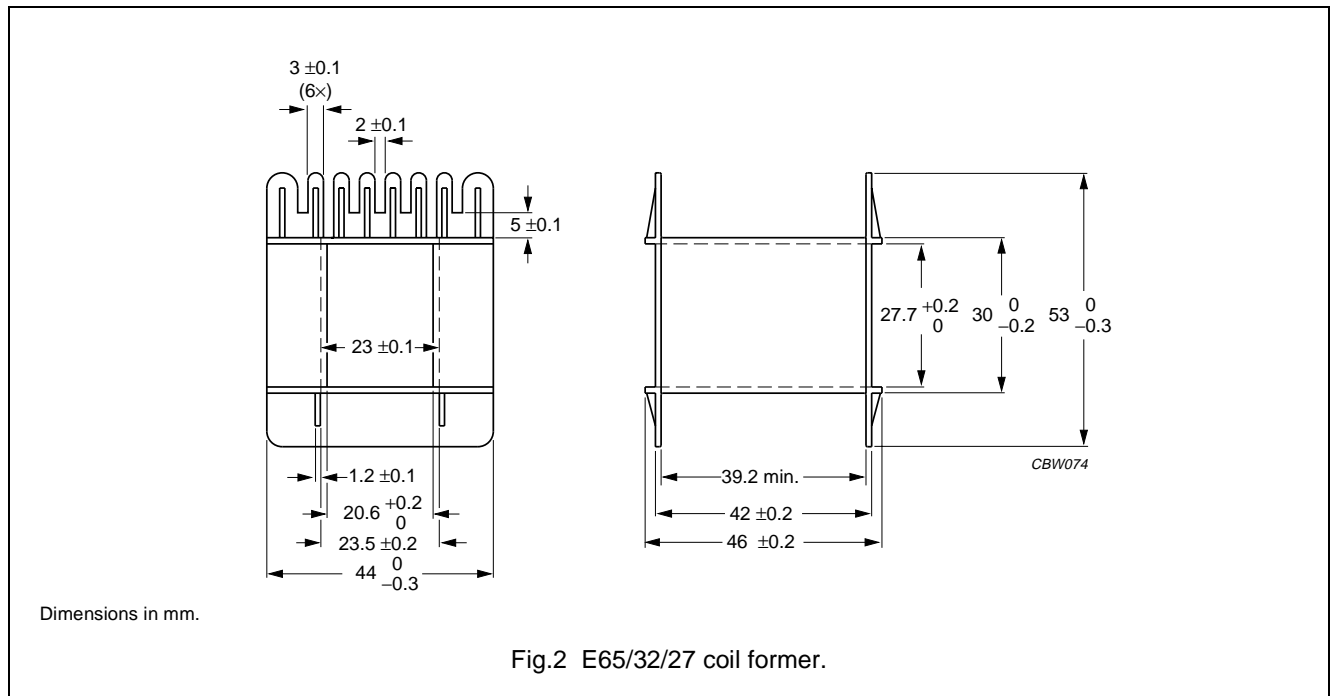
Properties of core sets under power conditions

GRADE	B (mT) at	CORE LOSS (W) at			
	H = 250 A/m; f = 25 kHz; T = 100 °C	f = 25 kHz; B = 200 mT; T = 100 °C	f = 100 kHz; B = 100 mT; T = 100 °C	f = 100 kHz; B = 200 mT; T = 100 °C	f = 400 kHz; B = 50 mT; T = 100 °C
3C90	≥ 320	≤ 9.1	≤ 12	–	–
3C92	≥ 370	–	≤ 8.5	≤ 47	–
3C94	≥ 320	–	≤ 8.5	≤ 47	–
3F3	≥ 320	–	≤ 10.5	–	≤ 21

COIL FORMER

General data for E65/32/27 coil former without pins

PARAMETER	SPECIFICATION
Coil former material	polyamide (PA6.6), glass reinforced, flame retardant in accordance with "UL 94-HB"; UL file number E41613(M)
Maximum operating temperature	130 °C, "IEC 60085", class B



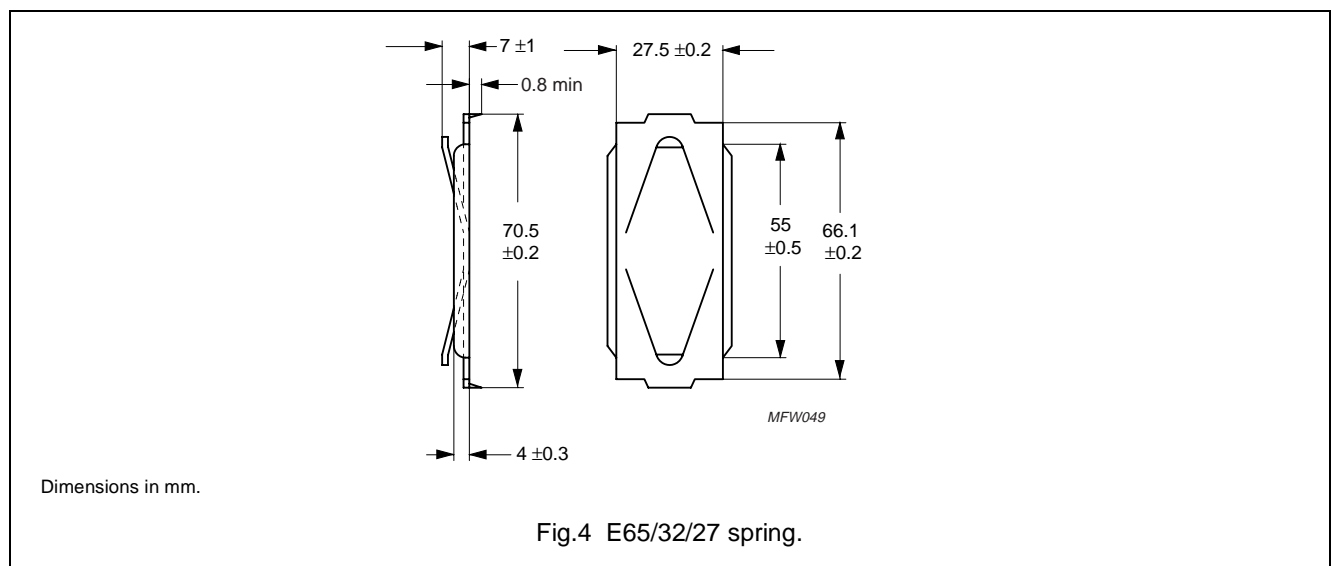
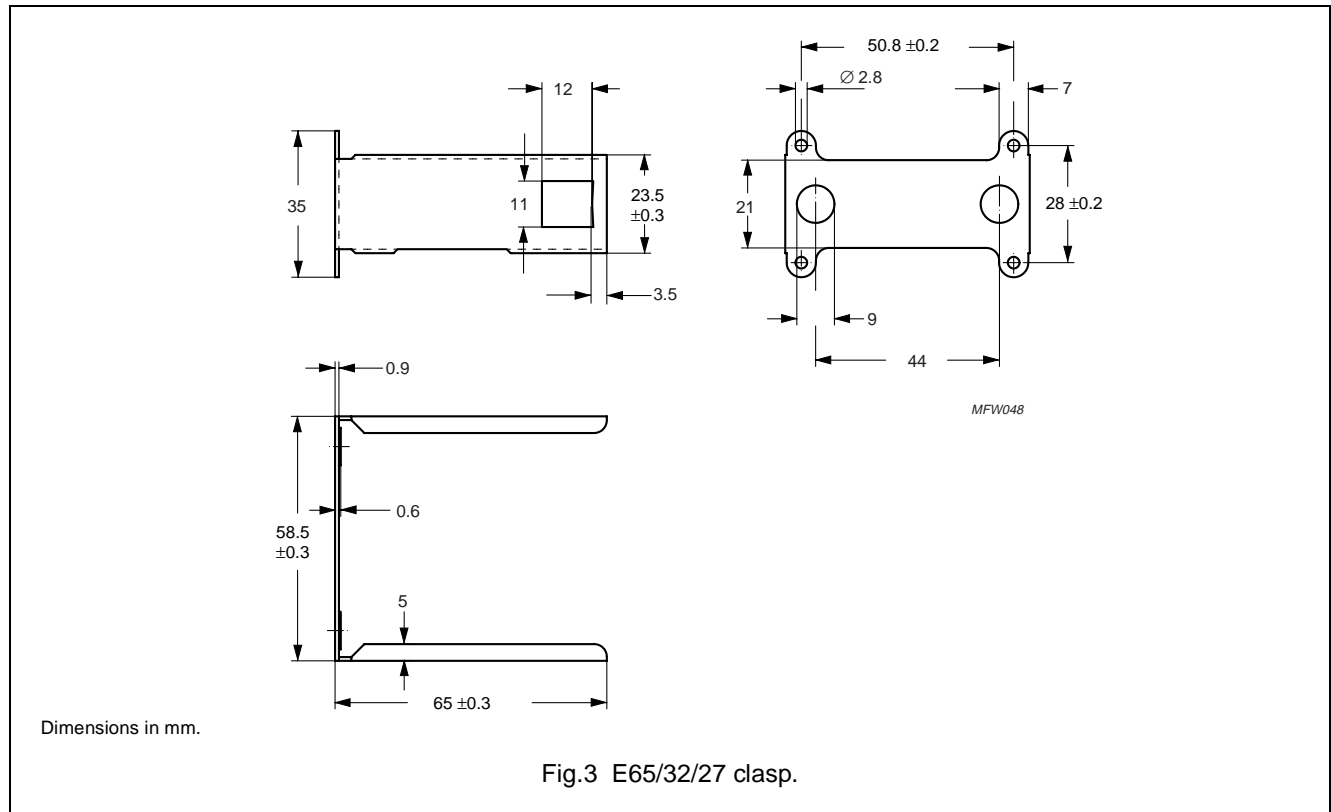
Winding data for E65/32/27 coil former without pins (E)

NUMBER OF SECTIONS	MINIMUM WINDING AREA (mm ²)	NOMINAL WINDING WIDTH (mm)	AVERAGE LENGTH OF TURN (mm)	TYPE NUMBER
1	394	39.2	150	CP-E65/32/27-1S

MOUNTING PARTS

General data for mounting parts

ITEM	REMARKS	FIGURE	TYPE NUMBER
Clasp	steel, zinc (Zn) plated	3	CLA-E65/32/27
Spring	steel, zinc (Zn) plated	4	SPR-E65/32/27






DATA SHEET STATUS DEFINITIONS

DATA SHEET STATUS	PRODUCT STATUS	DEFINITIONS
Preliminary specification	Development	This data sheet contains preliminary data. Ferroxcube reserves the right to make changes at any time without notice in order to improve design and supply the best possible product.
Product specification	Production	This data sheet contains final specifications. Ferroxcube reserves the right to make changes at any time without notice in order to improve design and supply the best possible product.

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PRODUCT STATUS DEFINITIONS

STATUS	INDICATION	DEFINITION
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Preferred		These products are recommended for use in current designs and are available via our sales channels.
Support		These products are not recommended for new designs and may not be available through all of our sales channels. Customers are advised to check for availability.